

**Notice of Allowability**

Application No.

09/438,885

Examiner

Vincent E Kovalick

Applicant(s)

MASAZUMI ET AL.

Art Unit

2673

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to applicant's RCE dated 8/11/04.
2. ☒ The allowed claim(s) is/are 16, 17 and 24-33.
3. ☒ The drawings filed on 12 November 1999 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☒ All b) ☐ Some\* c) ☐ None of the:
    1. ☒ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  6. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08),  
Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

## DETAILED ACTION

### *Response to Applicant's RCE and USPTO Final Office Action*

1. This Office Action in response to Applicant's RCE and Preliminary Amendment dated August 11, 2004 which are in response to USPTO Final Office Action dated May 12, 2004.

### *Allowable Subject Matter*

2. Claims 16-17 and 24-33 are allowed.

3. The following is an examiner's statement of reasons for allowance:

Regarding claim 16, the major difference between the teachings of the prior art of record (Ueno et al., USP 6,320,560; Huang et al., USP 5,748,277 and Knapp, USP 6,069,603) and that of the instant invention is that said prior art of record **does not teach** the method step wherein repeating the steps of (b) addressing at least some of said plurality of said scan electrodes sequentially and (c) addressing selected ones of said data electrodes synchronizing with the sequential addressing of the scan electrodes in the step (b) to form an image; comprises repeating the steps (b) and (c) as long as image data upon which said image is based remains unchanged and a predetermined number of repetitions have not occurred.

Relative to claim 17, the major difference between the teachings of the said prior art of record and that of the instant invention is that said prior art of record **does not teach** the method step (a) addressing at least some of said plurality of scan electrodes sequentially; and (b) addressing at least some of said plurality of said scan electrodes sequentially, comprises repeating the steps (a)

Art Unit: 2673

and (b) unless said image data has changed or a predetermined number of repetitions have occurred.

Regarding claim 24, the major difference between the teachings of the said prior art of record and that of the instant invention is that said prior art of record **does not teach** a liquid crystal display having a liquid crystal material with a memory effect; a driver for applying a pulse voltage to the liquid crystal display; and a controller for controlling said drive, when driving the liquid crystal display to display data thereon, to apply a pulse voltage having a pulse width that is a plurality of times shorter than a pulse width which is necessary for displaying the data on the LCD.

Relative to claim 25, the major difference between the teachings of the said prior art of record and that of the instant invention is that said prior art of record **does not teach** a liquid crystal display having a liquid crystal material with a memory effect; a driver for applying a pulse voltage to the liquid crystal display; and a controller for controlling said driver, when driving the liquid crystal display to display data thereon, to apply a plurality of pulse voltages each having a pulse width shorter than a pulse width which is necessary for displaying the data on the LCD.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

***Response to Applicant's Remarks***

4. The cancellation of claims 1-15 and 18-23, the incorporation of objected to dependent claims 26 and 27 into independent claims 16 and 17 respectively and the addition of new claims 26-33 are sufficient to place the application in a condition for allowance as indicated hereinabove.

***Conclusion***

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U. S. Patent No.	5,598,229	Okada et al.
U. S. Patent No.	5,384,067	Doane et al.
U. S. Patent No.	5,274,484	Mochizuki et al.
U. S. Patent No.	5,251,048	Doane et al.

***Responses***


6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vincent E Kovalick whose telephone number is 703 306-3020. The examiner can normally be reached on Monday-Thursday 7:30- 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bipin Shalwala can be reached on 703 305-4938. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Vincent E. Kovalick

March 6, 2005

  
BIPIN SHALWALA  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600